

AMENDMENTS TO THE CLAIMS

Claims 1-5. (Canceled)

6. (Previously presented) A method of analyzing an AT-command comprising:

receiving asynchronous transmission serial data in a transmitting portion based on a baud-rate clock from a DTE;

analyzing the data received with a controller;

generating the baud-rate clock to be output to the transmitting and receiving portion in accordance with instructions from the controller;

measuring a span of a start bit of a first character of an AT command transmitted from the DTE based on instructions from the controller to produce a measurement result;

analyzing the measurement result in a rate-analyzing portion;

outputting frequency-dividing data;

producing a sampling clock in a sampling-clock-generating portion based on the frequency-dividing data and outputting, when the rate of the start bit is more than a preset value, a flag indicating that the rate of the start bit is more than a preset value;

selecting, in accordance with whether or not the flag has been set, the frequency-dividing data from either the rate analyzing portion or the controller;

receiving data subsequent to the start bit of the first character based on the sampling clock;

holding the received data; and

reading the received data with the controller.

7. (Previously presented) A method of analyzing an AT-command as claimed in claim 6, further comprising checking each time when sampling a bit, whether or not the first character is 'A' or 'a' which corresponds to 41H or 61H in hexadecimal notation, and, when determining that the first character is neither 'A' or 'a', stopping the sampling operation and outputting a flag

indicating an error to the controller.

8. (Previously presented) A method of analyzing an AT-command as claimed in claim 6, further comprising stopping a sampling operation when, before sampling a bit subsequent to the start bit, the level of the received data of the bit subsequent to the start bit changes from high to low, and outputting a flag indicating an error to the controller.

9. (Previously presented) A method of analyzing an AT-command as claimed in claim 6, further comprising attempting to sample, after sampling eight bits subsequent to the start bit, a following stop bit, and, when being not able to detect the stop bit, outputting a flag indicating an error to the controller.

10. (Previously presented) A method of analyzing an AT-command as claimed in claim 6, further comprising operating the sampling-clock generating portion in a one-shot-pulse outputting operation mode other than a sampling-clock generating mode, and determining whether the sampling-clock generating portion operates in the one-shot-pulse outputting operation mode or the sampling-clock generating mode with instructions from the controller, and outputting one-shot pulse as an interrupt signal of the control portion in the one-shot-pulse outputting operation mode from the sampling-clock generating portion.

11. (Currently amended) A method of analyzing an AT-command comprising:
receiving asynchronous transmission serial data based on a baud-rate clock from a DTE at a transmitting and receiving portion;
analyzing the data received by the transmitting and receiving portion with a control portion;
generating the baud-rate clock to be output to the transmitting and receiving portion in accordance with instructions from the control portion with a baud-rate generating portion;
measuring the span of the start bit of the first character of an AT command transmitted from the DTE by counting continuously from a starting transition of the start bit based on

instructions from the control portion with a measuring portion;

receiving a measurement result of the measuring portion at a rate analyzing portion,

outputting frequency-dividing data for producing a sampling clock;

when the rate of the start bit is more than a preset value, outputting from the rate analyzing portion a flag indicating the rate of the start bit is more than a preset value;

selecting, in accordance with whether or not the flag has been set, the frequency-dividing data from either the rate analyzing portion or the control portion, and producing the sampling clock;

receiving data subsequent to the start bit of the first character based on the sampling clock;

holding the received data; and

reading the data with the control portion.

12. (New) A method of analyzing an AT-command comprising:

analyzing a rate of the AT-command in a control portion;

automatically setting a clock rate of a sampling clock based on the rate of the AT-command, wherein the clock rate is set by the control portion when the rate is below a preset value and is otherwise set by a peripheral circuit; and

receiving data subsequent to a start bit and reading this received data with the control portion.

13. (New) A method of analyzing an AT-command as claimed in claim 12, wherein the rate of the AT-command is obtained based on a count value obtained as a result of measuring a span of a start bit.

14. (New) A method of analyzing an AT-command as claimed in claim 12, further comprising stopping a sampling operation and outputting a flag indicating an error to the control portion when an error detecting portion detects an error.